DOCUMENT RESUME

ED 332 110 CG 023 367

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TITLE A Comparison of Some Portions of the Developmental Theories of Daniel N. Stern and Margaret S. Mahler.
PUB DATE May 91
NOTE 62p.; Doctoral paper, Biola University.
PUB TYPE Dissertations/Theses - Undetermined (040)

EDRS PRICE MF01/PC03 Plus Postage.
DESCRIPTORS Comparative Analysis; Developmental Psychology; Developmental Stages; *Infants; *Personality Development; *Social Development
IDENTIFIERS *Interpersonal World of the Infant (Stern); *Mahler (Margaret S)

ABSTRACT

This paper discusses Daniel N. Stern's (1985) work, "The Interpersonal World of the Infant: A View from Psychoanalysis and Developmental Psychology," with respect to its implications for theory on infant psychosocial development. The paper focuses on two areas: the reconceptualization of psychoanalytic developmental psychology, and the impact on psychoanalytic metatheory. The discussion is limited to Stern's first stage of development, The Emergent Self. Implications of infant observational research in general and Stern's work in particular for the reconceptualization of infant psychosocial developmental theory are discussed. The works of Heinz Hartmann, Rene Spitz, and Margaret Mahler are reviewed. A discussion of some methodological changes implemented by Stern is followed by an analysis of the research Stern cites in support of his concept of the Emergent Self. Implications for psychoanalytic metatheory are then discussed. Stern's Emergent Self is contrasted to Mahler's stages of normal autism and symbiosis. The conflict between Stern's and Mahler's works is discussed using drive/structural and relational/structural models. (Author/LLL)

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ED332110

A COMPARISON OF SOME PORTIONS OF THE DEVELOPMENTAL THEORIES OF DANIEL N. STERN AND MARGARET S. MAHLER

A Doctoral Paper

Presented to

the Faculty of the Rosemead School of Psychology

Biola University

In Partial Fulfillment

of the Requirements for the Degree

Doctor of Psychology

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by

Donn W. Peters

May 1991

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This paper discusses Daniel N. Stern's (1985) work The Interpersonal World of the Infant: A View From Psychoanalysis and Developmental Psychology with respect to its implications for theory on infant psychosocial development. This paper focuses on two areas impacted by Stern: the reconceptualization of psychoanalytic developmental psychology, and the impact on psychoanalytic metatheory. The discussion is limited to Stern's first stage of development, The Emergent Self. Implications of infant observational research in general and Stern's work in particular for the reconceptualization of infant psychosocial developmental theory are discussed. The works of Hartmann, Spitz and Mahler are reviewed. A discussion of some methodological changes implemented by Stern is followed by an analysis of the research Stern cites in support of his concept of the Emergent Self. Implications for psychoanalytic metatheory are then discussed. Stern's Emergent Self is contrasted to Mahler's stages of "normal autism" and "symbiosis". The

conflict between Stern's and Mahler's works is discussed using drive/ and relational/structural models.

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A COMPARISON OF SOME PORTIONS OF THE DEVELOPMENTAL THEORIES OF DANIEL N. STERN AND MARGARET S. MAHLER

Introduction

The works of Daniel N. Stern (1983, 1985) have caused psychoanalysts to re-investigate several conceptual foundations within psychoanalysis. Since the publication of The interpersonal world of the infant: A view from psychoanalysis and developmental psychology, psychoanalysts have been struggling with how to incorporate implications from this and other infant observational research into their theorizing and clinical work (Blum, 1987; Dowling & Rothstein, 1989; Lichtenberg, 1983; Meissner, 1978; Shane, 1987; Shane & Shane, 1978; Tolpin, 1987; Zelnick & Bucholz, 1990). Those areas involved are the conceptualization of human development in general, and of the human infant in particular. This reconceptualization of infant psychosocial development not only has implications for conceptualization of psychoanalytic developmental psychology, but it also has vast implications for psychoanalytic metatheory as well .

Implications of Stern's Work: the Conceptualization of Psychoanalytic Developmental Psychology

Stern's impact in the area of conceptualization of

psychoanlaytic developmental psychology has been threefold. First his work is research based as opposed to speculation based. He has attempted to fix all of his major concepts in research. His work is not without speculation to be sure, but his work is the first psychodynamic theory to attempt to make widespread use of research that exists in developmental psychology.

Secondly, he has used direct observation of infants as his primary modality. This use of direct observation makes use of what Stern (1985) calls the observed infant and stands conceptually opposed to the clinical infant. Previously psychoanalysis relied primarily upon the clinical infant for theory building. The clinical infant is that infant that comes into being by reconstructing the experiences of adult patients in psychoanalysis. Stern proposes to build his theory on direct observation of actual infants as much as possible.

Thirdly Stern (1985) challenged what he calls the regression-fixation hypothesis. This hypothesis assumes that development proceeds normally in stages until, for some reason, the process becomes fixated. This hypothesis further links certain developmental tasks with certain developmental stages. The hypothesis is then applied to clinical work in such a manner that when any of the certain developmental tasks is presented as an issue by the client, that client is assumed to be regressed and fixated at that

developmental stage. Stern called into question the regression-fixation hypothesis. He suggested that it is more reasonable to view clinical issues as issues for the lifespan and to separate them from their developmental stage. Stern said this separation represents a shift in thinking ushered in by the choice to build infant developmental theory from the observation of infants as opposed to building from the clinical reconstructions of adults. Why direct observation of infants should challenge the regression-fixation hypothesis is not completely clear.

Some Methodological Changes in Infancy Research

In order to more fully understand the impact of Stern's work, it is important first to look at some simple yet revolutionary changes in the methodology of infant research. Stern reports that direct observation of infants provides a window, a new look, into the infant's mind through which the infant can be observed and answers to questions about the infant's world can be provided. While observing infants directly did not originate with Stern (cf. Spitz, 1965), his approach to it is new (Tyson, 1987).

Formerly, says Stern, research with infants, even observational research, was concerned with formulating questions that infants could understand. Research began with the investigator asking, "How can I pose this research question so the infant will understand it?" The result was that the research findings told little about the infant's

mind but much about the researcher's perception of the infant's mind. Stern's approach was a simple shift in focus. He began with the infant and his/her present repertoire of behaviors and attempted to formulate questions to the answers the infant was already giving.

Stern's (1988) approach asked, "What infant behaviors might serve as suitable answers to questions?" and formulated appropriate questions around those answers. Stern suggested that good answers to questions about infant experience are behaviors that are frequently performed by the infant, are under voluntary muscle control, and can be solicited during alert inactivity. Three such behaviors qualify: head-turning, sucking, and looking. These are in fact the behaviors that behaviorists have been looking at for the past three or four decades. The fact that Stern was incorporating extant behavioral research to build psychodynamic theory is new.

Stern's Conceptualization of the Developmental Process

Stern's (1985) focus was on the subjective experience and the development of a sense of self that forms the foundations for object relations. His assumption was that these senses of self are evoked and developed in the context of interpersonal relationships. The data obtained from his and other research are used to support his argument: At the earliest stage of development (0-2 months) "the infant can experience the process as well as the result, and it is this

experience of emerging organization that I call the emergent sense of self" (1985, p. 45).

He went on to clarify what he meant by the sense of an emergent self. It "concerns the process and product of forming organization." It "includes two components...the products of forming relations between isolated experiences and the process." He concluded that "during the first two months the infant is actively forming a sense of emergent self. It is a sense of organization in the process of formation." His argument was centered around the infant's emerging experience of the "process of forming relations between isolated experiences" (Stern, 1985, p. 47). Stern wanted to say that the infant's ability (process and product) to form relations between isolated experiences is the task that results in the formation of an emergent sense of self.

To establish his argument that an emergent sense of self is experienced and can be observed and measured in infants 0-2 months-old, Stern cited several research studies on amodal perceptual functioning in infants. This processing is also called inter-modal or cross-modal functioning. Amodal perception is the ability to link an experience of something in one modality, as, for example vision, with an experience of the same thing in another modality, such as hearing, or touch, or smell. Linking experiences here is taken to mean recognition in some manner that the two

separate perceptual experiences are of the same object.

Stern's contention was that amodal perception is a valid argument for the infant's ability to experience the process of forming relations between isolated experiences. This ability is the key to Stern's concept of the initial sense of self, the emergent sense of self. Further, he was arguing that the ability of very young (2 month-old) infants to perceive something in one modality and then to show evidence of that prior perception in another modality suggests that infants can experience this process.

This he contended, argues for his conceptualization of infancy. That is, he argued that infants, from the beginning of life, do not exist in a primarily undifferentiated state, but are active in processing stimuli from the environment. They do not live in a self-enclosed shell of autism, protected by a stimulus barrier only to graduate to symbiotic relationships via the process of differentiation. Stern suggested that infants seek and are most adept at processing a certain kind of stimuli. It is interpersonal stimuli the infant seeks. This is why he argued that infants are interpersonal from the beginning. Stern was challenging the long held concepts of normal infant autism, stimulus barrier and symbiosis. These issues are discussed at length further in this paper. This discussion first focuses on amodal perception as it relates to the infant's ability to form relations between isolated experiences.

Analysis of Relevant Research

Because an empirical paradigm such as Stern's is supported or denied support by the validity of the research cited, it now seems appropriate to examine the research that Stern himself has cited.

As a starting place, Stern cited research concerning mental states of infants. Wolff (1966) found in his round-the-clock observations of infants, that infants demonstrated several states of consciousness: sleep, hunger, eating, fussing, crying, full activity and alert inactivity. It is this last state, alert inactivity that particularly interests Stern. His research focused on infant experience during this state. This fact has bearing on the interpretation of his work and is therefore addressed as wel further on in this paper.

Discussion of Research on Amodal Functioning Cited by Stern. The first support he enlisted was the MacFarlane (1975) study in which 3-day-old infants were presented with breast pads from other nursing mothers and their own mother. A pad was placed on either side of the infant's head. The author reported that these infants showed a significant preference for their mother's breast pads as opposed to any other's. In terms of Stern's argument this study seemed to support his contention that the infant is forming a relationship between two olfactory experiences, that of feeding and that of the breast pad. Whether this is actually

so is dubious. What appears to be separate experiences to the researcher may not be separate in the infant's mind.

The next experiment Stern cited related the modalities of touch and sight (Meltzoff & Borton, 1979). Twenty-nine day-old infants were allowed to mouth one of two pacifiers: one with nubs and one without. They were then presented visually with larger styrofoam models of both pacifiers. The authors reported that the infants looked significantly longer at the model of the pacifier they had just mouthed than at the other. This suggests that the infants experienced the process of forming a relationship between two separate modalities. In terms of Stern's (1985) argument this would suggest the existence of an emergent sense of self at this early age.

The design of the Meltzoff and Borton (1979) study is a modification of a paradigm used to test infant memory. The dependent measure in this study was gazing time. This design lacked pre-test measures and control groups. Such lack would normally cast suspicion upon the internal validity of the study. However, the experimenters went to great efforts to counterbalance all the possible confounding variables such as the specific visual sphere in which the object was presented, the specific object with which the infants were familiarized, observer effects, and other variables. It is therefore reasonable to assert that the threats to internal validity usually controlled for by pre-

tests and control groups were not significant in this study. In fact the authors stated that

> there were no significant differences due to sex of the infant, familiarization of the object or method of feeding (breast or bottle), nor were there significant preferences for fixating the right versus the left side or for fixating the sphere versus sphere-with-nubs (p. 403).

Next, Stern chose a study that presented 3-week-old infants with varying intensities of sound and light (Lewkowicz & Turkewitz, 1980). In this study the subjects were repeatedly presented with white-light followed by white-noise stimuli of different intensities. Independent variables were presented in a habituation-dishabituation-generalization schema. The dependent measure was cardiac response. It is interesting to note that cardiac response does not qualify as one of the behaviors Stern (1985) listed that were performed voluntarily during alert-inactivity.

The authors stated that they found a "U-shaped relationship between magnitude of cardiac response and loudness" (p. 597). This means that infants responded most to the loudest and softest sounds. While on the surface this study seems to have supported Stern's position, that is, amodal functioning abilities of early infants suggests they do not exist completely in an undifferentiated state. Further reading of the study suggests otherwise.

The authors do indeed support the existence of amodal functioning abilities in the 3-to 4-week old infant and concluded that the "infant responds not to the differences

in the modality of stimulation but to the amount of stimulation" (p. 606). However they stated further that "our approach here suggests the caveat that care must be taken to distinguish between various types of cross-modal equivalence. That is, some equivalences may be based on primitive and undifferentiated functioning"

Lewkowicz and Turkewitz (1980) supported their conclusion by citing other studies that failed to obtain reliable evidence for cross-modal transfer of form prior to 6 months of age. Their conclusion that cross-modal functioning may be evidence of primitive and undifferentiated functioning is further supported, they suggested, by the lack of evidence for such functioning in their study with adults.

Stern used this study in support of his thesis. He understood the results of this study to demonstrate that infants are successful in amodal functioning at 3 weeks old. It is doubtful that he worked through the implications of Lewkowicz and Turkewitz (1980) study. He needed to offer some logical rationale to refute Lewkowicz and Turkewitz's assertion concerning the lack of cross-modal functioning in adults.

Stern also presents studies in proprioception (Field, Woodson, Greenberg, & Cohen, 1982; Meltzoff & Moore, 1977). Meltzoff and Moore (1977) studied infants aged 12-21 days and found them to reliably imitate facial gestures by an

adult model. After evaluating two other hypotheses for their findings the authors concluded that the imitative responses were accomplished

> through an active matching process and mediated by an abstract representational system. Our recent observations of facial imitation in six newborns--one only sixty minutes old--suggests to us that the ability to use intermodal equivalences is an innate ability of humans (p. 78).

In further support for Stern's position they state that this amodal ability "...becomes the starting point for psychological development in infancy and not its culmination" (p.78). Although this study is highly controversial, and does not replicate well, Stern has chosen to use it in support of his hypothesis.

Stern then presented experiments relating auditory to visually presented speech (Kuhl & Meltzoff, 1982; MacKain, Studdert-Kennedy, Speiker & Stern, 1983; McGurk & MacDonald, 1976). The problem with using these as support is that all of the studies are done with infants older than 0-2 months old. McGurk and MacDonald used 3 to 4 year-olds, Kuhl and Meltzoff used 4-5 month-olds, and MacKain et al. used infants 5-6 months old.

Kuhl and Meltzoff (1982) presented 18 to 20 week-old infants with two side-by-side filmed images of a human speaker articulating two different vowel sounds. A sound track corresponding to one of the faces was played for the infant. Following a 20-second familiarization period (10 seconds for each face) the subjects were presented with the

stimuli. The only source of light in the room was from the film, while an infrared source illuminated the infants so the infrared camera could record the visual fixations (the dependent measure). The infants looked significantly longer at the matching rather than the mismatching face. Kuhl and Meltzoff interpreted their results to mean that "infants can detect a cross-modal relationship between the auditory and visual products of articulation" (p. 1139).

MacKain et al. (1983) did much the same as Kuhl and Meltzoff (1982). However, they used slightly older infants, 5-6 months-old, and presented them with consonant-vowel-consonant-vowel disyllables in the same manner as Kuhl and Meltzoff. Likewise, they reported that the infant gazed significantly longer at the synchronous display rather than the non-synchronous display. They also interpreted these results as the infants' capabilities of "intermodal speech perception" (p. 1348).

It is the opinion of this author that the studies cited by Stern, with the exception of those done with older infants, did support his contention that amodal functioning abilities do exist in 2-month-old infants. It is an extremely interesting question whether the existence of cross-modal ability in the 2-month-old infant provides sufficient logical grounding for Stern's (1985) assertion of the existence of an emergent sense of self. That is, why does the ability to form relationships between discrete

perceptual experiences qualify as the task that forms an emergent sense of self. Why this ability and not some others? Stern offered no logical foundation for this assertion. He simply asserted it to be true. An analysis of this and other philosophical and logical underpinnings is a necessary and interesting task, but beyond the scope of this paper.

Another question regarding the ability to form relations between discrete perceptual experiences is whether all organisms that demonstrate this ability posses an emergent sense of self. If pigeons or rats demonstrate this ability do they have an emergent sense of self?

Discussion of Research on Amodal Functioning not cited by Stern. There exist, at this time, no other studies of amodal perception with infants in the 0-2 month-old range. Several other studies, however, not cited by Stern, here examined infant amodal perception and are worthy of examination. Gottfried, Rose, and Bridger (1977) investigated cross-modal transfer in 1-year-old infants. Using a 30-second familiarization period, infants were allowed to become familiar with one of two objects either by mouth or by hand. After familiarization the infants were presented with both objects visually.

Visual fixation and reaching behaviors were scored as to whether the infant responded to the novel or the familiar stimulus. Gottfried et al. (1977) concluded that "infants

can exhibit cross-modal transfer by their natural tendency to respond selectively to novel and familiar stimuli after receiving information in another sensory modality" (p.122). These same authors replicated their results in a later study, with two important modifications (Rose, Gottfried & Bridger, 1981). This time they performed the familiarizations in the dark using infrared recording, and they extended the familiarization time to 60 seconds. In the first study they obtained significant results in all areas tested. In the second they obtained significance only after 60 seconds of familiarization. They concluded that "V-T (visual-tactual) cross-modal functioning and tactual intramodal functioning exist in infancy" (p. 96).

Bushnell and Weinberger (1987) attempted to study cross-modal functioning in 11-month-old infants by presenting them with specifically shaped blocks for visual and tactile exploration. The blocks were placed in a box in such a manner that the infant could see one shape but not the other. The unseen shape could be touched, while the seen block could not be touched. They were attempting to establish whether after seeing one block the infant could detect, by touching, if the unseen block was the same or different. The blocks were paired such that the seen and unseen blocks were discrepant (mismatched) shapes or control (matched) shapes.

The Bushnell and Weinberger (1987) study suffers from

some serious methodological problems. The dependent variable, whether the infant could detect the mismatched shape or not, was subjectively measured. Observers rated "the presence or absence, and intensity of behaviors intuitively related to the infant's detection of discrepancy, including double takes, visual search, manual search, surprise, wariness and so forth" (p. 603). The raters' task was to score from the infant's behaviors whether this was a discrepancy or control trial.

The authors concluded that their results indicated "visual-tactual discrepancies ... were detected by infants." However, it seems that this is not a study of infants' ability to detect visual-tactual discrepancies, but a study of raters' ability to guess correctly from infant behaviors the nature of the trial. The primary weakness here is the subjective nature of the dependent variable.

Secondly, Bushnell and Weinberger (1987) failed to demonstrate the empirical validity of their intuitive assumptions. A further study is needed to establish that the observed behaviors do indeed relate reliably to infants' detection of discrepancy. It would seem more logical to score the amount of time the infant spent tactually exploring the stimuli and determine if there are any systematic differences for discrepant versus control trials. A reasonable hypothesis, based on the other research in this area, is that the infant will explore the discrepant (novel)

stimulus longer than he/she will explore the control (familiar) stimulus.

To their credit the authors completed a second study and incorporated this idea. They looked at the time the infant spent exploring the block using five hand behaviors: hovering, poking, gripping, digging, and sweeping. Their best results were obtained when the discrepant shape was visible but not tangible. In this case the infants spent significantly more time exploring the discrepant than they did the control trial. The authors concluded from this study that "visual information plays a directive, goal-seeking role for infant's manual explorations" (p. 601).

Conclusions About the Relevant Research.

Summarizing all of the relevant research on cross-modal perception in infancy, it appears that this ability does indeed exist in infants, and therefore it is reasonable for Stern to use this ability as a building block for his theory. A caveat is in order, however. Even though Stern concluded that "infants thus appear to have an innate general capacity which can be called amodal perception" (p.51). This statement is made in the chapter where he described the stage of the emergent sense of self the 0-2 months-old infant. Most of the research on amodal perception has been done with infants about 1-year old. Some of the research cited by Stern (Kuhl & Meltzoff, 1982; McGurk & MacDonald, 1976; McKain et al., 1983,) was done with older

infants than Stern discussed. Therefore some of the research cited does not apply to his argument, because, he suggested amodal ability is present earlier than the research has demonstrated.

However, there are four studies of such perceptual abilities in infants in the 0-2 months-old range that do support his argument, including those of Lewkowicz and Turkewitz (1980), MacFarlane (1975), Meltzoff and Moore (1977), and Meltzoff and Borton (1979). Critiquing this group of four studies, it is the view of this author that support for Stern's conclusions though sufficient could be even stronger. One weakness in this group is that there are only four studies that supported his conclusions, and of those studies, two were conducted by the same investigator. Another weakness in this group is that the study by Lewkowicz and Turkewitz (1980) did not look at the behaviors that Stern listed as good infant answers. Further the authors of the various studies were not certain that their results represented more or less differentiated functioning. They concluded that their results might represent either amodal perception abilities or undifferentiated functioning.

The strength in this group of studies is that those by Meltzoff tested primarily infant tactual perception via the mouth, whereas the other studies tested tactual perception via the hand. In this author's opinion it seems reasonable to assume that the sensorium of a 2-month-old infant would

be more highly developed in the mouth rather than in the hand. Therefore, the studies that support Stern, though few in number, do exhibit some degree of strength.

These studies demonstrate that 0-2-month-old infants have some cross-modal perceptual abilities. Therefore, it is reasonable in constructing his theory for Stern to use this ability as a building block. Whether his interpretation, that 0-2 month-old infants are developing an emergent sense of self, is valid can not be answered from these studies. Interpretations do not rise from the data, but from the theoretical assumptions used to frame the research questions.

A most simple and elemental understanding of Kuhn (1970) was his assertion that data are not theory free but theory laden. Therefore to examine the data of cross-modal perception and attempt to conclude from them whether Stern's interpretations of this data are warranted is to look amiss. It is necessary to examine the studies to see that their results meet communally accepted scientific rigor. The validity of the interpretation of those results can not be found in the studies themselves, but by understanding the assumptions behind the research. Evaluating Stern's interpretation of these studies must take into consideration an exploration of the assumptions he made. These assumptions are subsumed further on in this paper under the heading of psychoanalytic metatheory.

Stern challenged the dominant psychoanalytic metatheory, which Greenberg and Mitchell (1983) have called the drive/structure model. It has guided the formation of the research questions and therefore determined the interpretations of research data in psychoanalytic developmental psychology. In order to understand Stern's challenge and therefore his interpretations of the research data a review of psychoanalytic developmental psychology is relevant.

Infant Development in the Historical context: Hartmann and Spitz

The work of Daniel Stern most directly challenged that of Margaret Mahler who posited "normal autism and symbiotic" phases of infant development. Mahler's book The Psychological Birth of the Human Infant: Symbiosis and Individuation, published in 1975, has held the theoretical high ground as far as psychoanalytic developmental theories of infancy are concerned. Her work clearly has been in the Ego Psychology tradition building as it has upon the foundation of Heinz Hartmann (1958). The most salient concepts of Hartmann's work, further developed by Mahler, were his concepts of human adaptation, and a theme of developing levels of object relations.

Hartmann's (1958) work focused on the ego's adaptation to the environment. He defined adaptation as "primarily a reciprocal relationship between the organism and its environment" (p. 24). He also modified Freud's ideas on the

origin and development of the ego by redefining development as "not simply the outcome of the struggle with the instinctual drives, with love-objects, with the superego, and so on" (p. 15). He suggested that the neonate child is born in an undifferentiated matrix within which there exist apparatuses of primary autonomy. Ego and id both differentiate from this matrix. It is not that ego differentiates from id, as in the classical model, but that ego and id are both innately present in the matrix and differentiate from one another. "Strictly speaking there is no ego before differentiation of ego and id, but there is no id either, since both are products of differentiation" (Hartmann's 1958, p. 12).

Therefore development can no longer be viewed solely as the result of the outworkings of intersystemic conflict (ego vs. id), but also as extrasystemic (ego vs. environment). This is accomplished by means of apparatuses of primary autonomy whose purpose is adaptation, and which later develop into ego functions, operating from the beginning of life. They remain in the conflict-free sphere of ego functioning under normal conditions. Under abnormal conditions these apparatuses become involved in conflict, and thus Hartmann (1958) introduced the concept of intrasystemic conflict.

Hartmann also theorized that in the course of development, the infant's maturational processes encounter

an average expectable environment. Infant development comprises the dynamic process of interaction between the infant's own developmental processes and the environment's ability to facilitate and nurture these processes. This was later elaborated as the necessity for full and complete development of a good fit between the infant and his or her environment. Both of these themes of the maturational processes and the facilitating environment were more fully developed by Winnicott (1965).

Hartmann (1958) likewise proposed a developmental sequence of object relations. He theorized that the neonate progresses from a place of primary narcissism, defined as the cathexis of self representations (in Freud's terms, ego's cathexis of itself), to a place where the object is experienced only to fulfill the infant's needs (in Kohutian terms, selfobject). The infant finally progresses to a level of object constancy defined as "cathexis of the constant mental representation of the object regardless of the state of need" (Blanck & Blanck, 1974, p. 35).

In order to understand the methodological changes ushered in by Stern, it is necessary to consider one more forerunner to his work. Renè Spitz (1965), in his studies of infants born to mothers in prison, initiated a methodological revolution through direct observation of the development of the infants under his care. This was a huge methodological change. Previously most work about

development was carried out by observing what Stern (1985) called the "clinical infant." That is, the developmental sequence of the "clinical infant" was reconstructed from the experience, past and present, of regressed adult patients in psychoanalysis.

Infant Development in the Historical Context: Mahler

It was upon the theoretical foundation laid by Hartmann and the methodological foundation laid by Spitz, that Mahler et al. (1975) built her theory. Margaret Mahler began by observing infants in her laboratory. At first her observations were limited to infants diagnosed as psychotic, but later she included normal infants as well. She began with Hartmann's (1958) concept of the undifferentiated matrix. The infant who undertakes the journey to object constancy begins the first few weeks of life, she stated, in "a state of primitive hallucinatory disorientation, in which need satisfaction belongs to his (that is the neonate's) own omnipotent, autistic orbit" (Mahler et al., 1975, pp. 7-8). This phase, called normal autism, lasts about two months. During this phase, she theorized that the infant lives in a world of confusion, unable to differentiate between self and others, or between internal and external.

Shortly after the autistic phase, which lasts about 2 months, the infant begins to separate good experiences from bad, pleasurable from non-pleasurable, from which a dim awareness of a need-satisfying other dawns. This then is

the beginning of the phase of symbiosis. This term is borrowed from biology and meant to imply a psychological "living together of two dissimilar organisms in close association or union, where this is advantageous to both; it is so to be distinguished from parasitism" (Blanck & Blanck, 1974, p. 54). This phase lasts from approximately 2 to 5 months of age. Mahler understood these two phases, normal autism and symbiosis, to be fuller descriptions of the phase of primary narcissism introduced by Freud (1905/1952) and redefined by Hartmann.

Infant Development in the Present context: Stern

One is struck immediately, when reading Stern (1985), that his focus is quite different than that of Mahler's. His focus, reflected by several questions he posed, was on the development and quality of the self as it relates to the development and quality of the interpersonal world of the infant. For example, he asked, "How do infants experience themselves and others?" "Is there a self to begin with, or an other, or some amalgam?" "How do infants experience the social events of 'being with' an other?" "What might the experiences of relatedness be like as development proceeds?" "In sum what kind of interpersonal world does the infant create?" (Stern, 1985, p. 3).

Mahler, following Hartmann's lead, chose to focus on the development of infantile object relations via the separation-individuation process on the way to achieving

object constancy. Stern focused on the development of the self that forms the foundation for object relations. These two works then, while overlapping in the area of developing object relations, are quite different from each other in focus.

Stern (1988) suggested that his work attempted to address four issues. First is the issue of how faithful a historian is the infant. This involves the relationship between fantasy and reality. Is the infant fantasy or reality based? Or is the infant some of both? Stern's view is that traditional psychoanalytic theory (cf. Klein, 1934) regarded the infant to be fantasy based originally, and then gradually to develop a reality orientation. He, on the other hand, is suggesting that the infant is reality based, a good historian, from the beginning.

The second issue concerns whether the infant is active or passive in his/her orientation to the external world. Stern proposed a view of the infant as active. He saw the infant as actively engaged in the process of constructing mental representations of experience. This addresses the issue of primary narcissism. If the infant is active in seeking out interpersonal relationships, then it would discourage a view of a passive infant living in a self-enclosed autistic shell. The concepts of stimulus barrier, autism and symbiosis, which form the foundations for the concept of primary narcissism are addressed later in this

paper.

The third issue concerns the quality, in terms of self and other differentiation, of the infant's earliest relationships. Does the infant develop from merger to differentiation or from differentiation to merger? Traditionally it has been assumed that newborn infants live in a boundaryless, undifferentiated world. This is the basis of Mahler's (1975) choosing normal autism and symbiotic phases as the starting point for her theory. In particular Stern is calling into question some of the traditional viewpoint epitomized by Mahler and her colleagues. He has seriously questioned the Mahlerian concepts of normal autism and symbiosis.

Traditional interpretation of psychoanalytic theory in general and Mahler (1975) in particular led to the perception of the infant as a "totally unresponsive organism whose focus is entirely inward, a mindless creature encased in a hardened shell, a being whose only desire was to avoid and shut out stimuli from the environment" (Kaplan, 1987, p. 35). Stern, in describing his disagreement with Mahler, says

> this is probably the basis of our disagreement as to whether it is easier to work toward having merger and union with people or whether it is easier to work toward getting separated from them. So I'm going to choose that it is easier--rather that the ultimate aim of development is to have more union and merger experiences and not less (Kaplan, 1987, p. 28).

The fourth issue concerns developmental theory and psychopathology. Presently the manner in which stage

theories are used suggests that clinical issues like orality, dependency, aggression, trust and others, when viewed in an adult patient, can be traced to a fixation and regression to a particular infant and/or child stage of development. In this manner clinical issues become linked to developmental stages (Erikson, 1950).

Conclusions About Stern's Work: The Conceptualization of Developmental Psychology

Stern has ushered in changes in the way data are gathered and in the manner in which psychoanalytic developmental theory is built. He has made use of the direct observational model as his primary data gathering tool. It would seem that in the future it would be difficult for any psychoanalytic developmental theory to gain an audience without reliance upon direct infant observation as the major mode of data gathering.

He has also brought about changes in the way in which theories are constructed. Previously almost all psychoanalytic developmental theory was constructed retrospectively. That is, going back in time the experience of adult patients in psychoanalysis was used to construct what it was assumed the experience must have been as an infant. Stern proposed that theory building be done prospectively. He suggested that the direct observation of infants needs to be foundational for infant developmental theory building. He was aware that for the present time there exist great gaps in what is known from direct

observation of infants. In that case, he suggested the gaps be filled with retrospective data. Stern has attempted to use prospective theorizing as much as possible, thereby changing both the method and theory.

Implications in Stern's Work: Psychoanalytic Metatheory

The work of Daniel Stern also has broad implications for psychoanalytic metatheory. In terms of metatheory there appear to be two basic models of human nature dominant in psychoanalysis. Greenberg and Mitchell (1983) identified these as the drive/structure and relational/structure models. Both models make very different assumptions about basic human nature and therefore emphasize very different fundamental aspects of the human person.

The Drive/Structure Model

The drive/structure model was articulated by Freud (1905). This model assumes that drive is the most basic level of human functioning. The human has innate drives which seek discharge. In this model the infant is conceptualized as born in a state of primary narcissism, with no means of independently reducing tension caused by the drives. The infant is enclosed in an objectless world, protected by a stimulus barrier which shields him or her from overwhelming environmental stimuli. The infant is completely dependent upon the ministrations of the primary caregivers (external objects) to reduce his tension.

Mahler et al. (1975) described this state in the infant as the stage of normal autism. For example, when infants are hungry, they cannot feed themselves, nor can they tell themselves that food will be coming shortly. They therefore demand that the tension produced by hunger be reduced immediately. Infants are unable to gain the gratification demanded. Because the caregivers are incapable of meeting all of the demands of the infant, he or she experiences anxiety. It is this intolerable anxiety, occasioned by the drives, that propels the infant into social relationships. The need to discharge anxiety awakens in the infant the awareness of an object, external to him/herself. This awareness begins to draw the infant out of the autistic shell.

But the infant, who primarily seeks gratification by discharging anxiety, has not as yet developed sufficient boundaries to be able to tolerate frustration. The primary anxiety at this age is the fear of the loss of the caregiver. To discharge this anxiety the infant establishes a boundaryless attachment to the caregiver. At this time the character of relationships begins to change from autistic to symbiotic. Because of the need to discharge anxiety the infant engages in interpersonal relationships.

In the drive model, relationships are forced upon infants because they must rely upon some external object in order to gratify drives. Relationships are not primary,

drive is. Relationships are derivatives of drive. Relationships are the result of the necessity to discharge drive tensions. The autistic environment fails to produce gratification internally, therefore gratification is sought externally. The implication is that if drives were gratified within the autistic environment, there would be no need for external objects or relationships.

Object relations in the drive model take on a distinct character. Because object relations are secondary to drive gratification, the nature of the object in the environment is unimportant in respect to its characteristics. The only characteristic necessary is that it serve its function to of discharging tension. "In classical drive theory, object relations are derivatives of drive gratification and defense...Within the drive/structure model, social reality constitutes an overlay, a veneer superimposed upon the deeper, more 'natural' fundaments of the psyche constituted by the drives" (Greenberg & Mitchell, 1983, p. 80).

In order to understand how drives relate to objects in this model, one might think of a lightning rod as the object. The lightning seeks only to discharge its tension. It is blind to the object, inso far as it conducts energy. The lightning will choose a building, a tree, an umbrella or the unfortunate golfer, nine-iron in hand. Relationships in this way serve only to keep tension (anxiety) at a manageable level. Objects are impersonal and do not need to

have subjective or personal qualities. With regard to the quality of these kinds of relationships in a community, it is strange how two humans seeking primarily tension discharge could ever relate to one another on a meaningful level.

This model appears to have two serious deficits. The first is the lack of reciprocity in relationships. It abounds in discussion of the nature of the humans seeking discharge, but if objects receiving tension are also humans, who likewise seek to discharge their tension, how does either receive tension? What is the mechanism by which a human object receives energy from another human? What happens to this energy once it has been received? This model lacks discussion of how humans act as discharge objects for each other, taking on energy from other humans.

The most serious deficit of this model is that it assumes the animal-like nature in humans to be fundamental. In order to understand the model one simply needs to think of animals roaming about their environment seeking only survival and the opportunity to discharge the tension brought about by the basic drives of hunger, thirst, sex, and aggression. If basic human nature is fundamentally animal-like drive and discharge how is meaning derived from this? In the drive model ego differentiates from id. How can ego which reasons, tests reality, delays gratification, and is mind (i.e., human) ever develop from something that

is biology (i.e., non-human)? How can one get from brain to mind? In commenting upon this incongruity, Guntrip says "We would all be happier if we were all centaurs, but in that case, the 'equestrian underpinnings' would remain bestial, the apparently human top half would not be truly human" (1973, p. 50).

The Relational/Structural Model

The relational/structural model was given birth by Harry Stack Sullivan. It is said of Sullivan that he began with

> a conviction that classical drive theory was fundamentally wrong in its basic premises concerning human motivation, the nature of experience, and the difficulties of living, and therefore drive theory provides an inadequate and essentially misleading foundation for psychoanalytic theorizing and clinical technique (Greenberg & Mitchell, 1983, p. 80).

The relational/structural model was further developed and articulated by W. R. D. Fairbairn, D. W. Winnicott and Harry Guntrip who posited a completely different form of human nature. This model conceives of human persons as fundamentally relational, a model in which social relations are therefore primary, not derivative.

Relationships in the Sullivanian model are not drive and discharge oriented but interpersonal. "The field of psychiatry is the field of interpersonal relations--a personality can never be isolated from the complex of interpersonal relations in which the person lives and has his being" (Sullivan, 1940, p. 10). This character of relationships is echoed by Winnicott when he stated that

"There is no such thing as an infant," implying there is no such thing as an infant outside of his/her relational context (Winnicott, 1960, p. 39). In the relational-structural models, which can be either intrapsychic or interpersonal, "we are born, develop, and live in the context of relations with others, and our experience is composed of and concerned with the patterning of these relations" (Greenberg & Mitchell, 1983, p. 102).

Because Stern did not resort to explanations from drive theory and used only relational rationale, it may be contended that his work clearly lies within and supports a relational/structural metatheory. He saw human persons as actively seeking from the very beginnig of life meaningful interpersonal relations, of a different character than drive and discharge. He contended that the ability of 2-month-old infants to form relations between discrete perceptual experiences in conjunction with other abilities clearly implies a relational nature of persons that is present very early on. These abilities (that he discussed later in his book) include (a) the ability to form self-invariants and (b) the development of RIGS (representation of interactions that have become generalized). Stern used the cross-modal ability as a building block to these later, higher and more complex functions. His work suggested that if the infant were to be conceived of as in the drive model--blind to the object, living in a boundaryless, autistic or symbiotic

world, seeking only discharge of tension--this ability would be impossible. Stern saw the infant as actively seeking interpersonal stimulation, actively engaging the caregivers from birth. This is a very different view of the infant than that presented in the drive model.

Discussion of Implications for Psychoanalytic Metatheory

In order to understand the metatheoretical implications of Stern's findings, it is necessary to turn first to reviews of his work. While most reviews tended to be generally positive, somewhat recitative, and reflective (cf. mirroring), they generally say little of real metatheoretical value about his work (Devine, 1988; Hobson, 1987; Katz, 1987; Mann, 1987; Schrut, 1987; Sheiner, 1987; Spiegel, 1987; A. Stern, 1987; Tenzer, 1987). For the most part the reviewers bypassed the metatheoretical issues. However, there exists one review (Kaplan, 19897) that is more critical and informative, and does bring the metatheoretical issues to light. It therefore, warrants a more careful point by point evaluation. Kaplan focused her review on the three concepts: "autism, stimulus barrier and symbiosis" (p. 30). These three issues are the core of developmental drive theory in general and Mahler's work in particular. Kaplan, arguing for the validity of drive theory, accused Stern of "idiosyncratic interpretations of the research findings, which when scrutinized, turn out neither to support nor refute his interpretations" (p. 28),

and again, of having "questionable grasp of traditional psychoanalytic theory (p. 27).

Discussion of reviews of Stern's work. Kaplan's (1987) first critique of Stern is aimed at a perceived error in methodology. She, as did Stern, placed great emphasis on the work of Wolff (1966) and particularly upon Wolff's focus on the alert-inactive state of infant consciousness. She stated that most of Stern's work was carried out in the alert-inactive state, which appears to be a subtle support of Stern. However, she stated later that it is "...one of the flaws of Stern's reports on neonatal research that he does not specify the state of consciousness or other critical details of experimental conditions under which the results were obtained" (p. 32).

Kaplan suggested that because most of the studies do not make explicit the state of mental consciousness of the subjects, suspicion about the interpretations and implications of their results is warranted. While this is literally true, a careful scrutinizing of the studies, as Kaplan suggests, shows that several of the experimenters, (e.g., Lewkowicz & Turkewitz, 1980; Rose, Gottfried & Bridger 1981) had to drop some subjects from the study because of crying, fussing, sleeping, or refusing to engage the stimuli. Consequently the subjects must have been in the alert-inactivity state, and therefore her criticism on this point appears to be invalid.

Even though the infant spends so little time in the alert-inactive state, Stern's point is not depreciated by this. He was attempting to demonstrate that the infant is actively engaging the environment. He was not attempting to demonstrate that this is how the infant spends a majority of his/her time.

Kaplan's second area of criticism focused on the concept of stimulus barrier and is more of a theoretical critique. She suggested that Stern misunderstands the concept of stimulus barrier. His understanding of the stimulus barrier concept was that it is "of intrinsic biological origin, in the form of heightened sensory thresholds except to internal stimuli. It was postulated that the infant was unable to handle stimuli that broke through the shield" (Stern, 1985, p. 232).

Kaplan suggested that the proper understanding is to see the stimulus barrier as more of a stimulus attenuator. "Freud spoke of the barrier first as though it were an impermeable fortress of hardened neurological tissue." He even used a metaphor of a bird's egg to describe this. "Then several paragraphs later he referred to its shielding properties. The shield he said, allows the energies of the external world to pass into the next underlying layers with only a portion of their original intensity" (Kaplan, 1987, p. 36). It appears that Stern's heightened sensory thresholds is not substantially different from Freud's idea

of the threshold allowing only a portion of the energy to pass through. Therefore Kaplan's criticism, that Stern did not understand this concept again appears to be invalid.

Continuing her theoretical critique, Kaplan likewise suggested that Stern's understanding of the concept of the normal autistic phase was incomplete. While she commented that Stern had misunderstood the concept of autism, her argument is unconvincing. Stern had written "if by autism we mean a primary lack of interest in and registration of external stimuli, in particular human stimuli, then the recent data indicate that the infant is never 'autistic'....In autism there is a generally selective lack of interest in or avoidance of human stimuli. That is never the case for normal infants. It is true the infant becomes more social, but that is not the same as becoming less autistic" (p. 234). It seems that here also Kaplan's critique is invalid.

Kaplan's third theoretical critique focused on Stern's criticism of symbiosis. She stated that "the concept of symbiosis, of course, is the other major aspect of Mahler's work that has been misleading" (p. 37). In spite of this confusion created by Mahler herself, Kaplan claimed that Mahler knew the difference between the normal infant state of symbiosis and adult regressions to a symbiotic-like condition. She claimed that Stern, as well others, did not recognize this distinction in Mahler. She said further that

they viewed Mahler as seeing only the clinical infant, that is in Kaplan's words, as seeing only the "emphatically adultomorphic versions of symbiosis" (p. 38). Kaplan claimed that Stern had chosen to use Mahler's work as a foil for his own theories while failing to represent them with precision.

While Kaplan had recognized the ambiguity in Mahler's work, it is not clear that Mahler had herself recognized it. In addition, Stern demonstrated that he understood Mahler adequately when he relayed that she had undergone change in respect to this concept. Stern wrote, "In a recent discussion, she [i.e. Mahler] suggested that this initial phase might well have been called 'awakening' which is very close to 'emergence'" (Stern, 1985, p. 235). Kaplan also recognized this move by Mahler (p. 38). Awakening appears much closer to emergence than it does to autism. If Stern's report of his conversation with Mahler is correct, then it appears that she had moved closer to his position.

In summary, Kaplan's critiques of Stern are puzzling. She alleged conceptual misunderstanding but her arguments are unconvincing. She alleged idiosyncratic interpretations of the data and conceptual leaps. This is difficult to understand. All infant developmental theorists and probably all theorists in general are guilty of over-interpreting their data and making conceptual leaps, Mahler et al. (1975) not excluded. Why this should be an area of contention is difficult to comprehend.

In a more recent review, Cushman (1991) has presented a social constructionist analysis of Stern's work. He has discussed three aspects of Stern's theory: (a) the concept of the core self, (b) the attunement processes, and (c) the acquisition and effect of language. Cushman has not only critiqued Stern's theory, but he was critiquing something bigger. He reported that his use of Stern's theory is only illustrative of his larger criticism, for he was criticizing psychology's attempt to find "foundational laws of a universal, transhistorical human nature." In Cushman's view this is "not doable" because human beings are "constructed by the social practices of local communities" (Cushnman 1991, p. 206). To remove this process from the culture in which it is embedded is not only impossible but philosophically and politically dangerous. Cushman has suggested that theories of this sort accomplish a justification of the political status quo. Though tempting, an analysis of the political implications of Stern's theory is beyond the scope of this paper.

Cushman's criticism has centered around the proposed idea that Stern has implied to have found but not actually found "universal elements of human development. Rather his theory is popular because his formulation is such a clear statement of the present indigenous psychology" (p.207). Later Cushman stated that "this image (Stern's infant) is extremely appealing to modern Western readers. Why? Because

it is them. It describes so well who they are, what they are interested in, what is most vital to them" (p. 208). It seems questionable that these are sufficient criticisms of Stern. One purpose of theory is to give a cohesive rationale for the phenomena. The more closely the theory describes the phenomena the better a theory it is. This seems especially true for psychological theories. The closer the theory is to the experience of the subjects it describes the better a theory it is.

Cushman has failed to recognize Stern's point. Stern has shown that the infant's development of a sense of self is constructed out of the social interactions with mother, other caretakers and the environment at large. Cushman's critique is more appropriate to developmental theories that stress intrapsychic development to the neglect of psychosocial development (cf. Klein, 1932). Stern has demonstrated in microcosm what Cushman has described in macrocosm. Stern has built on the foundation of Winnicott (1965), who elaborated upon the idea that the infant not only brings maturational processes to the interaction but that the environment draws out, develops, shapes and forms the infant through social interaction. It is certainly reasonable to consider cultural variables as a part of what Winnicott had in mind when he thought of the environment.

Conclusions about reviews of Stern's work. The differences between Mahler and Stern are profound and

metapsychological in nature. Stern showed that choosing a phase of normal autism and symbiosis qua normal makes a decision about the basic human condition, whether it is one of "aloneness or togetherness" (Stern, 1985, p. 240). He suggested that his metapsychology is a choice for "connectedness, affiliation, attachment and security as givens" (p. 240). He posited that working toward such things is the goal of life, that humans start out alone and work toward intimacy. This places him clearly in the relational/structure model, though it does seem to be a shortcoming in a theory of separation-individuation such as Mahler's. Although Mahler is concerned with self and object relations, she may have left out of her theory a final phase. After having achieved object constancy and separation-individuation the individual now needs to work toward integration into the community of relationships. Mahler's theory may be thought of as too "American." It leaves consumers with John Wayne and Clint Eastwood as heros, fully individuated but not integrated into human relationships, needing no one.

It is this author's opinion, as well as that of Greenberg and Mitchell that while Mahler's work led her in the direction of Stern, she remained unable to make a clean theoretical break from her paradigm. As stated by Greenberg and Mitchell (1983) "the organizing principle of Mahler's developmental map is based on the relations between the self

and its objects, but it is a focus which is backed up with explanatory principles derived from classical drive theory" (p. 272).

Kaplan (1987) seems to have been critical of Stern in order to retain Mahler within a traditional and ego analytic paradigm. She seems as unwilling as Mahler was herself to break with the traditional drive paradigm. "Stern's basic error is to present these two distinct ways of knowing and interpreting the world as antagonistic to one another. He obscures how closely his progressive stages fit in with Mahler's phases of separation-individuation" (Kaplan, 1987, p. 36). Here Kaplan was clearly trying to assimilate Stern within the drive/structural paradigm. Stern seems to have been clearly aware that he was breaking with the drive/structure model both theoretically and methodologically. Stern, by demonstrating the interpersonal nature of the infant, indeed broke with the drive model and its metatheory. At the metapsychological level Stern presented a metapsychology whose view of the infant was relational/structural. His content was relational, his method empirical and prospective.

Even though Mahler (1975), as Stern, directly observed infants, she did not arrive at his same conclusions because she was working from the drive model. Mahler began to change some of the method, and stretched the model, but she never broke with it. Stern changed the paradigm (relational

versus drive) and the method (prospective and empirical versus retrospective clinical reconstructions from adults, that is, the clinical infant). Mahler moved toward the newer model and in the process stretched the older. But she was unwilling to make fundamental changes in the model itself. It was Kaplan who demonstrated this. In Mahler's schema there exists an interaction between the drive needs and the interpersonal. Kaplan (1987) said that "after the physical needs are attended to, the neonate's greatest hunger is for human dialog" (p. 31). Here she was retaining drive as fundamental. Mahler attempted to stretch the paradigm she, herself said "the view that the infant contributes a significant share to the interactions between himself and the interpersonal environment is not at all antagonistic to the traditional psychoanalytic theory" (Kaplan, 1987, p. 35). This amounts to an attempt to accommodate drive metatheory with relational metatheory. The problem is that they are fundamentally incompatible.

An Attempt At Accommodation: Pine.

Fred Pine (1985, 1986, 1987, 1990), one of Mahler's associates, has also attempted an accommodation of the paradigms. Pine's contributions, some of which are clinically useful, have fallen short in the overall picture because he has failed to develop the "conceptual glue" necessary to hold together two fundamentally incompatible views of human nature and society (Greenberg & Mitchell,

1983, p. 352).

A most useful aspect of Pine's work is his concept of moments. He has argued that conceiving of the early infant as autistic or symbiotic is not incorrect. He proposed "that the infant has *moments* of the experience of boundarylessness or merger" (1987, p. 566) and he suggested that during early infancy these moments of merger are critical in formation of psychic structure. Pine also theorized "redefining a phase as the period in which the *critical formative events* in any particular area of development take place without regard to the momentariness or temporal spread of these events" (1987, p. 567).

This concept of moments is a very useful and helpful concept, and may be compatible with infant states described by Wolff (1966). It helps to clear the misconception that the name of a particular phase of development is not a blanket description of the subject but rather an attempt to describe the most powerful and important events in development at that time. Pine's work can be praised for his desire to stay close to the experience of the client. This certainly gives his work a real-world feel. It is apparent that his work has been forged through countless hours of empathic listening and staying near the client's experience.

A major criticism of Pine is his failure to deal adequately with issues of metatheory. Moreover, he seems to

have been reluctant to do so. In his book Developmental Theory and Clinical Process (1985), Pine wanted to "avoid metapsychological concepts unless I can define them in experience-near terms." He stated further: "I am not taking a stand against metapsychology; I simply do not find it useful in the enterprise undertaken here" (p. 32). Even further he has suggested in another work,

> that no conceptual glue is needed to hold them together- that is no glue at the level of metapsychology that is over and above experience. The way they are held together, that is, the way these diverse phenomena become integrated in any one individual, is itself a product of development and a task of development (Pine, 1990, p. 12).

It is true that integration is a task of development. However to leave the issue at this point is akin to saying that how people work out their conflicts is a task of development and a superordinate theory to provide order and structure to understanding phenomena is unnecessary. The purpose of theory, and in this case metapsychology, is to provide structure to the phenomena. It is true that the theory may be inadequate to explain all the data and therefore may need constant revision, and also true that it is a step removed from experience-near data. Even so such factors these do not obviate the need for theory.

Pine's failure to deal with issues of metapsychology leads this author to wonder as well about Pine's anthropology. He seems reluctant to address the fundamental nature of the human person. In his book Drive, Ego, Object

and Self: A Synthesis for Clinical Work (1990) Pine conceived of psychoanalysis as consisting of four psychologies: (a) drive, (b) ego, (c) object and (d) self. Each of these psychologies have their domain, their particular assumptions and their relative utility. Pine's viewpoint is more of a perspectivalist option. In a Roshomon-like manner, he says each psychology is looking at the infant through its particular set of assumptions. Each describes something true about the nature of the human infant. Whether either description is exhaustive and conclusive is an open question in his thinking. Pine has suggested therefore that the agenda of deciding which paradigm or developmental theory is correct is inappropriate.

It appears that Pine was suggesting some sort of perspectival anthropology. The validity of this approach depends upon whether he was suggesting a phenomenological or ontological perspectivalism. In a phenomenal approach he would be suggesting that phenomena can be classified in one of the four psychological models, or maybe more. Clinicians have all had the experience where a client's phenomenal experiences will fit one model much better than another. A phenomenal model makes an anthropological statement. It suggests that all that can be known are phenomena. Statements about nature underlying phenomena are useless. The blind men cannot ever know the real nature of the

elephant, only the phenomena comprising it.

An ontological perspectival model conveys something about the core nature of persons. It suggests that humans are not of one integrated nature, but of one that depends upon the observer's perspective. Is Pine suggesting that the core nature of humans is perspectival? And thus no one model is more accurate about the nature of reality than the other? It would appear that this is what Pine is implying with his desire to stay with experience-near data.

This author is suggesting that while reality may be unknowable in an exhaustive, complete and ultimate sense, it is knowable to the extent that truth claims can be made about models of reality. One model can be described as a more accurate conceptualization of reality than another in that it more fully explains the data. The process of theory building requires constant revision of theoretical models in light of new data. It is this author's opinion that in comparing the relational and the drive models such a claim can be made. Relational models of reality are more accurate conceptualizations than drive models because present research suggests that persons are primarily relational. Stern's work suggests that a relational model more fully explains the phenomena.

Pine's method is to obscure the differences between paradigms, implying that there really are no differences. It is just a matter of perspective, all in how one looks at

the data. Although his idea of moments of particular experiences is noteworthy and helpful, he neglects the fundamental, irreconcilable differences in the paradigms. His concept of moments is not irreconcilable with a relational paradigm, or for that matter with Stern's theory. Stern's point is not that persons do not have boundaryless experiences, but that these are not the normal qua normal state from which we must all differentiate.

When attempting to resolve the conflicts between the works Stern and Mahler, a paradigm of integration is possible even though the conflict between their works is metapsychological in nature. If one attempts a phenomenological integration then it seems reasonable to conceive of Stern's work as answering the question, "What is the infant's experience like during alert-inactivity"? because the behaviors that qualified as good infant answers were only performed in that state. Mahler's work answers the question, "What are the critical formative events, in terms of self-other differentiation, in the infant's global experience"? With this schema in view there is no conflict between Stern and Mahler, simply a difference in perspective. It is this author's opinion that it is possible to integrate Stern and Mahler at the phenomenological perspectival level, but not at the ontological metapsychological level.

There exist two possible strategies for dealing with the

present metapsychological issues. One would be to arrange some sort of hierarchy between the present metapsychologies. In this case it would be suggested that drive is subordinate to relationship, not a "veneer superimposed upon the deeper, more 'natural' fundaments of the psyche constituted by the drives" (Greenberg & Mitchell, 1983, p. 80). Another possible strategy would be to develop a superordinate metatheory that would integrate all the present and possible future metapsychologies. This of course is a monumental task that even the discipline of philosophy has not been able to accomplish as yet.

Conclusions About Stern's Work: Psychoanalytic Metatheory

In conclusion, two attempts to deal with the metatheoretical implications of Stern's work have been reviewed. Kaplan tried to pull Stern back into the drive model, claiming that his differences are due to his lack of understanding, and that his senses of self are quite compatible with Mahler's stages of separation individuation. Pine says there is no issue. That is in his view there are no differences between the paradigms for they are simply ways of seeing the world. Neither of these approaches will suffice. Stern's work is clearly in the relational paradigm. He has broken with the older drive/structure paradigm and is within the relational/structure paradigm. He can not be accommodated to the drive paradigm.

Neither is Pine's approach viable. There are significant and unobscurable differences between the paradigms. The differences are to a point the results of perspective. But the differences exist at a much more fundamental level since they are differences are about the primary nature of humans. The relational/structure paradigm suggests that humans are primarily and fundamentally interpersonally relational. Relationships are not derivatives of drive or the result of failed self gratification. Centaurs exist in mythology, not in reality.

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